

CLAIMS

1-7 (Cancelled)

8. (Amended) A method of making the composition of claim 24 comprising the following steps:

- a) dissolving said liposoluble active ingredients in an appropriate solvent containing a stabilizing agent having a protective thermal and photo effect on said liposoluble ingredient so as to form a solution;
- b) adding the solution created in a), under agitation, to a xanthan solution so as to form a mixture;
- c) spraying the mixture created in b) into a chitosan solution; and
- d) recuperating of the hydrogel thus formed,

wherein steps a) to d) are essentially conducted in the absence of oxygen and light.

9. (Amended) A method of making the composition of claim 25 comprising the following steps:

- a) spraying a solution of xanthan into a solution of chitosan so as to form a hydrogel;
- b) recovering the hydrogel formed in (a) followed by freeze-drying the hydrogel;
- c) introducing the freeze-dried hydrogel into an aqueous solution comprising at least one of said hydrosoluble active ingredients and a stabilizing agent having a protective thermal and photo effect on said hydrosoluble ingredient;
- d) incorporating said hydrosoluble active ingredient(s) and stabilizing agent in the hydrogel by diffusion into the swollen hydrogel having a swelling index of 2000% or beyond to obtain a loaded hydrogel;

4

e) recovering said loaded hydrogel;
wherein steps c) to e) are essentially conducted in the absence of oxygen air and light.

10-12 (Cancelled)

13. (Amended) A dermatological product comprising the composition of claim 17.

14. The dermatological product of claim 13 wherein the product is a cream.

15. The dermatological product of claim 14 wherein said thermo and photosensitive substance is vitamin A.

16. (Amended) A food additive comprising the composition of claim 17.

17. (New) A controlled release composition comprising up to 25wt% of a thermal or photosensitive active ingredient selected from vitamins, amino acids, nucleic acids, peptides and mixtures thereof, and comprising a chitosan-xanthan hydrogel, and comprising a stabilizing agent having a protective thermal and photo effect on said thermal or photosensitive ingredient, said hydrogel comprising 24-40%wt chitosan and 60-76%wt xanthan.

18. (New) A controlled release composition in accordance with claim 17 wherein the stabilizing agent is an amino-acid.

19. (New) A controlled release composition in accordance with claim 17 wherein the stabilizing agent is an acid.

5

20. (New) A controlled release composition in accordance with claim 18 wherein the stabilizing acid is selected from the group of acids consisting of tartaric acid, metaphosphoric acid, citric acid and mixtures thereof.

21. (New) A controlled release composition in accordance with claim 17 wherein the stabilizing agent is a peptide.

22. (New) A controlled release composition in accordance with claim 17 wherein the stabilizing agent is a tripeptide.

23. (New) A controlled release composition in accordance with claim 17 wherein the composition is freeze-dried.

24. (New) A controlled release composition in accordance with claim 17 wherein the thermal or photosensitive active ingredient is liposoluble.

25. (New) A controlled release composition in accordance with claim 17 wherein the thermal or photosensitive active ingredient is hydrosoluble.